Enhancing NIH Partnering with Maryland Companies

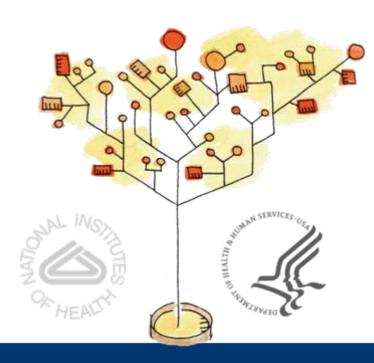
Mark Rohrbaugh, Ph.D., J.D.

Director

Office of Technology Transfer National Institutes of Health

U.S. Department of Health & Human Services

www.ott.nih.gov



Opportunities

- NIH as source of trained workforce
- Licensing IP and Materials from NIH
- Collaborations with NIH to address scientific challenges
- Access to expertise and facilities
- University-NIH-industry





NIH Scientist-Entrepreneur

Sherrie Bale GeneDx

Martha Knight CC Biotech

Bruce Weintraub Trophogen

Frank Robey AriaVax

Aprile Pilon Claragen

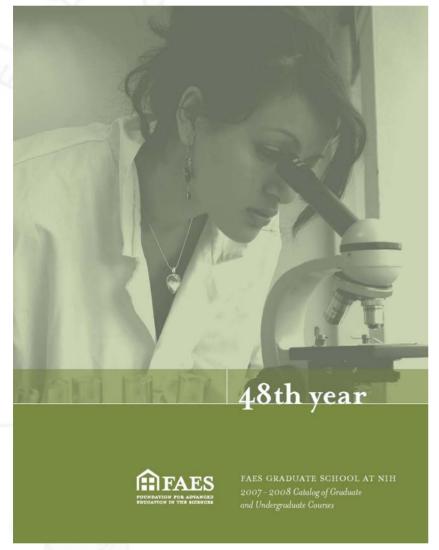
David Neville Angimmune

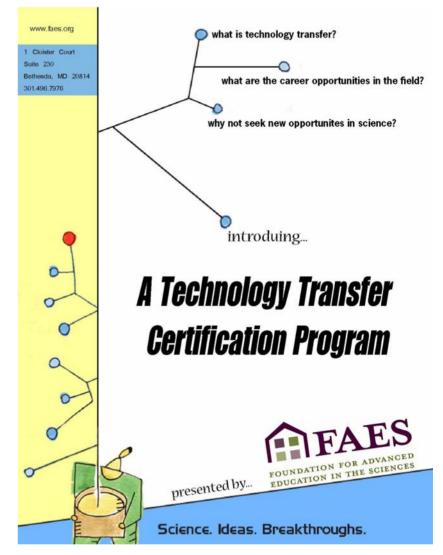
Pete Nara Biological Mimetics





Entrepreneurial Education Programs









Portfolio

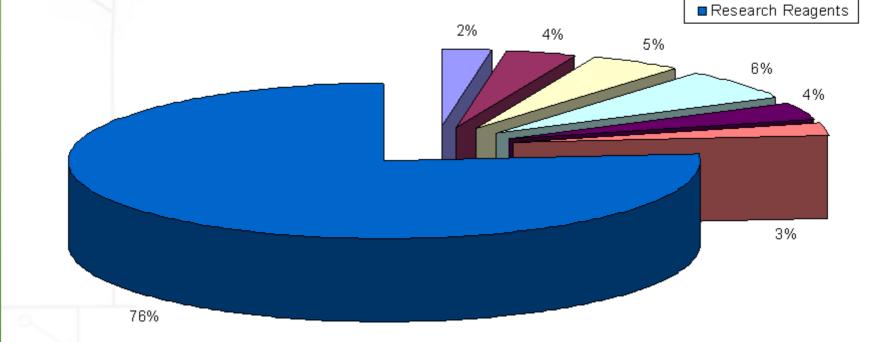
- **FY08**
 - 402 invention disclosures
 - 176 new US patent applications (343 US applications)
 - 88 issued patents
 - 259 licenses
 - \$97.2M royalties administered
- TOTAL ACTIVE
 - 3500 patents pending and issued
 - 1300 active commercial licenses
- **TOTAL TO DATE (1987-2008)**
 - More than 400 products (including research tools) on the market, 25 **FDA** approved
 - \$867M in royalties collected
 - \$45B in products sales by companies for our licensed products





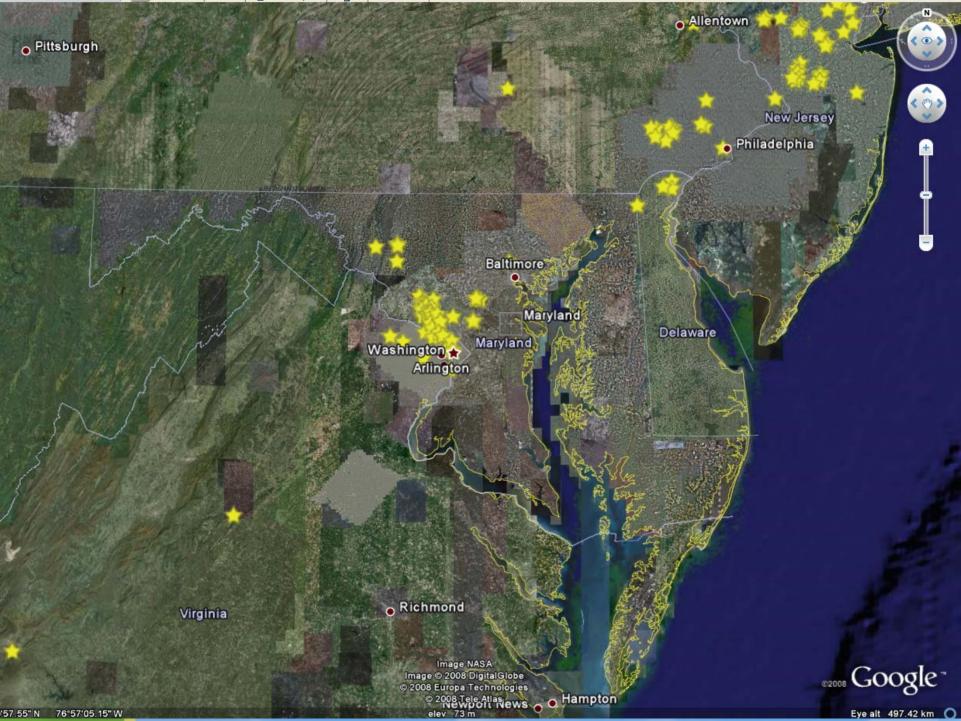
FY08 PRODUCTS 253 total











NIH Contributions to Products

LCM Theranostics

LGS 20/20 Gene Systems

caFlu MedImmune

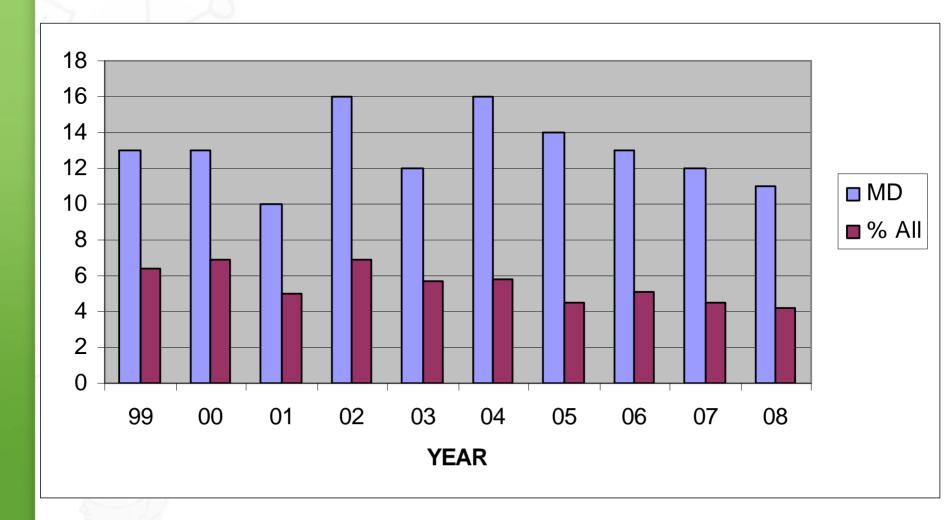
RSV MedImmune

HPV MedImmune

Pertussis AmVax



New Licenses







Collaborating with NIH Scientists

Material Transfer Agreements
Clinical Trial Agreements
CRADAs

CRADA Partners 1999-2008

Panacos VIPS CC Biotech

Surgivision Sequella Nucletron

EntreMed Wellstat MacroGenics

LifeTime Medical Analysis Systems

Correlogic RAMS Celsion

HGI AlbaPharm VIRxSYS

GenVec Beecher Profectus Biosystems

Novavax Dovetail Lentigen

CytoPulse GeneLogic AREVA

Rexahn 20/20 Gene Systems Aeras

Celera Martek Avalon

MacroGenics Boston Biomedica Osiris

Guilford Shimadzu RegeneRx MedImmune TIGR Biometrix





NIH Conflict of Interest Rules 2005

- No outside consulting with biotech and pharma companies
- Official duties not affected including scientific collaborations with no personal compensation





NIH CRADAs

Total active in FY08: 347

With MD companies: 18 (5.2%)

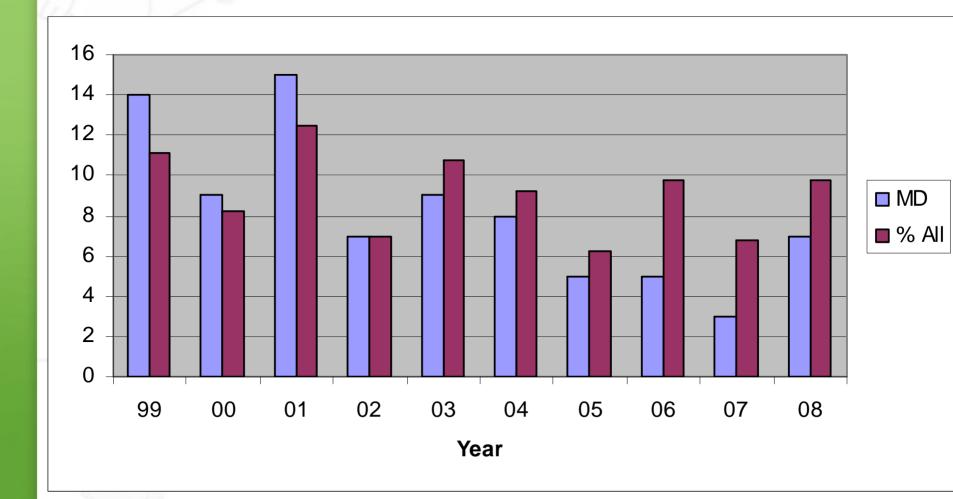
FY05 FY06 FY07 FY08

New 80 51 44 72





CRADAs







Enhancing NIH-Biotech Collaboration: Networking and Exposure

Biotech scientific presentations at NIH NIH scientist presentations to companies

NIH Technical Reviewers (e.g. TEDCO)

Activate at NIH (UMBC proposal to NSF)

Facilitating access to local incubators

Communication of COI rules

High Level Working Group to identify and resolve perceived and real logjams

Post-doc Exchange

TEDCO MOU and Showcase





Expert Locator Systems

- Various efforts in MD to develop a database of biomedical experts
- Goal to facilitate collaboration
- More development needed
- Current source of information on NIH intramural scientists

http://intramural.nih.gov/search/index.tml

Information on funded grants and contracts
 CRISP 1972-2009

http://crisp.cit.nih.gov





INITIATIVES

- Rare and Neglected Diseases –licensing opportunities
- P2P- joint project with NIH SBIR/STTR
- Product Showcase
- n-TTM Next-generation TT Management system
- eRM electronic research materials catalogue
- Research Resources joint project with MD-TEDCO and FLC
- Website promote NIH/FDA pipeline







Transforming medicine through discovery





